Clean Copy of Claim Amendments in Response to the Office Action of September 25, 2006
Williams et al.; Carbon Dioxide-Assisted Methods of Providing Biocompatible Intraluminal Prostheses

27. (Currently amended) A method of producing a biocompatible stent for *in vivo* use, comprising:

providing a stent having a portion thereof formed from polymeric material selected from the group consisting of surgical gut, silk, cotton, liposomes, poly(lactic acid), poly(L-lactic acid), poly(D,L-lactic acid), poly(glycolic acid), poly(D-lactic-co-glycolic acid), poly(L-lactic-co-glycolic acid), poly (D,L-lactic-co-glycolic acid), poly(Є-caprolactone), poly(valerolactone), poly(hydroxy butyrate), poly(hydrovalerate), polydioxanone, poly(propylene fumarate), and copolymers thereof, and collagen and chitosan, wherein the polymeric material contains one or more toxic materials;

immersing the polymeric material in a densified carbon dioxide composition such that the toxic materials are absorbed by the densified carbon dioxide composition; and

removing the densified carbon dioxide composition containing the toxic materials from the polymeric material, such that the stent is suitable for *in vivo* use.

28. (Previously presented) The method of Claim 27, wherein the one or more toxic materials are selected from the group consisting of organic solvents (polar or non-polar), unpolymerized monomers, polymerization catalysts, oligomers, and polymerization initiators.

29. (Previously presented) The method of Claim 27, wherein the densified carbon dioxide composition is a liquid composition, and wherein the immersing and removing steps are carried out in an enclosed chamber.

30. (Previously presented) The method of Claim 27, wherein the immersing step comprises adjusting the pressure and/or temperature of the densified

carbon dioxide composition to selectively absorb toxic materials from the polymeric material.

31. (Previously presented) The method of Claim 27, further comprising:

lowering the density of the removed densified carbon dioxide composition such that the toxic materials entrained therein become separated therefrom; and

removing the separated toxic materials.

32. (Previously presented) The method of Claim 31, wherein the step of lowering the density comprises reducing pressure and/or increasing temperature of the densified carbon dioxide composition.

33. (Previously presented) The method of Claim 27, wherein carbon dioxide in the densified carbon dioxide composition is present in a supercritical state.

34. (Previously presented) The method of Claim 27, wherein the carbon dioxide contains one or more of a co-solvent, a surfactant, and a co-surfactant.

35-37. (Canceled)

38. (Currently amended) The method of Claim 27, wherein the polymeric material is a coating on one or more portions of the stent.

39. (Currently amended) A method of producing a biocompatible stent for *in vivo* use, comprising:

providing a stent having a portion thereof formed from polymeric material selected from the group consisting of polylactic acid-polyethylene glycol block copolymer, poly(ethyleneoxide)-poly(butylenetetraphthalate), poly(lactic acid-*co*-lysine), a poly(L-lactic acid) copolymer and a poly(Є-caprolactone) copolymer, wherein the polymeric material contains one or more toxic materials;

immersing the polymeric material in a densified carbon dioxide composition such that the toxic materials are absorbed by the densified carbon dioxide composition, wherein pressure and/or temperature of the densified carbon dioxide composition is adjusted to selectively absorb toxic materials from the polymeric material;

removing the densified carbon dioxide composition containing the toxic materials from the polymeric material;

lowering the density of the removed densified carbon dioxide composition such that the toxic materials entrained therein become separated therefrom; and

removing the separated toxic materials, such that the stent is suitable for *in vivo* use.

40. (Currently amended) A method of producing a biocompatible stent for *in vivo* use, comprising:

providing a stent having a portion thereof formed from polymeric material selected from the group consisting of: poly(lactic acid), poly(L-lactic acid), poly(D,L-lactic acid), and a copolymer of poly(lactic acid), poly(L-lactic acid), and/or poly(D,L-lactic acid), wherein the polymeric material contains one or more toxic materials;

immersing the polymeric material in a densified carbon dioxide composition such that the toxic materials are absorbed by the densified carbon dioxide composition, wherein pressure and/or temperature of the densified carbon dioxide composition is adjusted to selectively absorb toxic materials from the polymeric material;

removing the densified carbon dioxide composition containing the toxic materials from the polymeric material;

lowering the density of the removed densified carbon dioxide composition such that the toxic materials entrained therein become separated therefrom; and

removing the separated toxic materials, such that the stent is suitable for *in vivo* use.

41. (Previously presented) The method of Claim 40, wherein the one or more toxic materials are selected from the group consisting of organic solvents (polar

or non-polar), unpolymerized monomers, polymerization catalysts, oligomers, and polymerization initiators.

42. (Previously presented) The method of Claim 40, wherein the densified carbon dioxide composition is a liquid composition, and wherein the immersing and removing steps are carried out in an enclosed chamber.

43. (Previously presented) The method of Claim 40, wherein the step of lowering the density comprises reducing pressure and/or increasing temperature of the densified carbon dioxide composition.

44. (Previously presented) The method of Claim 40, wherein carbon dioxide in the densified carbon dioxide composition is present in a supercritical state.

45-47. (Cancelled).

48. (Previously presented) The method of Claim 40, wherein the carbon dioxide contains one or more of a co-solvent, a surfactant, and a co-surfactant.

49. (Currently amended) The method of Claim 40, wherein the polymeric material is a coating on one or more portions of the stent.

50. (New) A method of producing a biocompatible stent for *in vivo* use, comprising:

providing a stent having a portion thereof formed from polymeric material selected from the group consisting of: poly(glycolic acid), poly(D-lactic-co-glycolic acid), poly(L-lactic-co-glycolic acid), poly (D,L-lactic-co-glycolic acid), and a copolymer of poly(glycolic acid), poly(D-lactic-co-glycolic acid), poly(L-lactic-co-glycolic acid), or poly (D,L-lactic-co-glycolic acid), wherein the polymeric material contains one or more toxic materials;

immersing the polymeric material in a densified carbon dioxide composition such that the toxic materials are absorbed by the densified carbon dioxide composition, wherein pressure and/or temperature of the densified carbon dioxide composition is adjusted to selectively absorb toxic materials from the polymeric material;

removing the densified carbon dioxide composition containing the toxic materials from the polymeric material;

lowering the density of the removed densified carbon dioxide composition such that the toxic materials entrained therein become separated therefrom; and

removing the separated toxic materials, such that the stent is suitable for *in vivo* use.

51. (New) The method of Claim 50, wherein the one or more toxic materials are selected from the group consisting of organic solvents (polar or non-polar), unpolymerized monomers, polymerization catalysts, oligomers, and polymerization initiators.

52. (New) The method of Claim 50, wherein the densified carbon dioxide composition is a liquid composition, and wherein the immersing and removing steps are carried out in an enclosed chamber.

53. (New) The method of Claim 50, wherein the step of lowering the density comprises reducing pressure and/or increasing temperature of the densified carbon dioxide composition.

54. (New) The method of Claim 50, wherein carbon dioxide in the densified carbon dioxide composition is present in a supercritical state.

55. (New) The method of Claim 50, wherein the carbon dioxide contains one or more of a co-solvent, a surfactant, and a co-surfactant.

56. (New) The method of Claim 50, wherein the polymeric material is a coating on one or more portions of the stent.